

REMARKS

In the Office Action mailed September 26, 2005, claims 11-20 were rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the applicant regards as the invention. Specifically, the Examiner objected to the term “normally substantially closed”. Additionally, the Examiner has objected to the term “polymer composite” in light of the disclosure.

By the present Amendment, independent claim 11 has been cancelled and the subject matter of claim 11 incorporated into newly filed claim 21. Newly filed claim 21 eliminates the terminology “normally substantially closed” as well as the term “polymer composite”. Based upon this change, claim 21 is believed to overcome the rejection made by the Examiner under §112. Additionally, the remaining dependent claims 12-20 have also been amended to address the informalities identified by the Examiner in the Office Action. Thus, claims 12-21 are believed to be definite and overcome the rejection made by the Examiner under §112, second paragraph.

In the Office Action, claims 11, 12 and 16-20 were rejected under 35 USC §103(a) as being unpatentable over the Kagawa U.S. Patent No. 5,458,951 in view of the Bell U.S. Patent No. 4,986,673 and the Speer U.S. Patent No. 5,811,027. Claim 15 was rejected under §103(a) as being unpatentable in view of the Kagawa ‘951, Bell ‘673 and Speer ‘027 patents in further view of the Komatus U.S. Patent No. 4,657,610. Claims 11, 12 and 16-20 were rejected under §103(a) as being unpatentable over the Bell ‘673, Kagawa ‘951 and Speer ‘027 references in further view of the Yoichiro et al (JP 10-200659). Claims 13 and 14 were rejected under §103(a) as being unpatentable over the Bell, Yoichiro, Kagawa and Speer references in further view of the Kai U.S. Patent No. 5,141,795. Claim 15 was rejected under §103(a) in view of the Bell, Yoichiro, Kagawa and Speer in view of the Kamatsu ‘610 reference.

By the present response, independent claim 11 has been cancelled and new independent claim 21 has been added. Newly filed independent claim 21 generally

incorporates the subject matter of claim 11 and addresses the §112 problems identified by the Examiner as well as adding additional limitations which the applicant believes are not disclosed by the combination of references cited in the outstanding Office Action.

Specifically, claim 21 has been amended to indicate that at least the first polymer film includes a series of gaps that restrict air permeation through the first polymer film when the first polymer film is in a static state. As further required by claim 21, when the air pressure within the open interior of the air permeable packaging bag increases above the air pressure to the exterior of the packaging bag, such as when the package is closed and being heated, the plurality of gaps gradually deform and open to permit the air within the open interior of the bag to permeate through the first polymer film. When the air pressure within the open interior returns to less than or substantially equal to the pressure outside the bag, the gaps reclose to again restrict air permeation through the first polymer film. In this manner, the air permeable packaging bag formed in accordance with the method of claim 21 allows the air permeable packaging bag to be reused.

In the Office Action, the Examiner initially rejected independent claim 11 based upon the Kagawa '951 reference in view of the Bell '673 and Speer '027 references. Specifically, the Examiner stated that the Kagawa '951 reference taught an air permeable film that included indentations that did not extend through the film. The Bell '673 patent was cited to show the formation of bags by sealing two panels together and the Speer reference was relied upon by the Examiner to illustrate a composite material. Thus, the Kagawa reference was the primary reference relied upon by the Examiner in this combination of references to show an air-permeable film.

By the present amendment, claim 21 has been amended to more specifically indicate that the first polymer film includes a plurality of gaps that each restrict air permeation through the first polymer film in a static state. When the air pressure within the air permeable packaging bag increases, the gaps gradually deform and open to permit the air within the interior of the bag to permeate through the first polymer film. This feature of the invention is not shown or taught by the Kagawa '951 reference. Instead, the Kagawa '951 reference specifically teaches a series of non-through pores (166).

These non-through pores cannot open to allow the flow of air through the polymer film, as is required by independent claim 21. Instead, the Kagawa '951 teaches directly away from this feature required by independent claim 21. For at least this reason, the combination of the references cited by the Examiner does not teach or suggest, nor render obvious the subject matter of independent claim 21. Thus, independent claim 21 is believed to be allowable over the combination of the Kagawa '951 reference with the other references cited by the Examiner.

In addition to the combination of the references cited above, claim 11 was also rejected under §103(a) as being unpatentable over the Bell, Kagawa, Speer and Yoichiro '260 patent. As discussed above, claim 11 has been cancelled and the subject matter of claim 11 generally incorporated into new claim 21, along with the additional limitations discussed above.

The Yoichiro '260 patent primarily relied upon by the Examiner teaches a packaging material that includes a base layer 2 having an internal pressure opening 4 with an open end on the external face of the base material. The packaging material further includes a heat seal layer 3 positioned over the base layer and covering the internal pressure openings 4 that penetrate the base material. In the specification of the Yoichiro '260 patent, the heat seal layer is described as being a thin fracture layer of comparatively weak breaking strength that fractures by internal pressure elevation within the bag formed from the packaging material. The fracture layer is described as being formed from a synthetic resin with comparatively weak breaking strength and having a thickness of 5-30 μm . When the internal pressure within the bag formed from the packaging material increase, the fracture layer ruptures, thus allowing internal pressure to be vented to the outside. After the fracture layer ruptures, however, the internal opening ports remain open to the exterior of the package and the fracture layer does not return to the static state upon the reduction of pressure within the open interior of the package formed from the packaged material.

In the structure taught by the Yoichiro '260 patent, the opening ports are open at all times and the fracture layer, not the opening ports, restricts air permeation. When the

pressure within the bag rises, the fracture layer ruptures allowing the interior pressure to vent through the packaging material. Once the pressure decreases, the fracture layer does not close and, since the internal pressure openings remain open at all times, air can permeate through the packaging material.

As required by independent claim 21, the gaps are formed such that during static state, the gaps restrict air permeation. However, upon an increase in pressure, the gaps are formed to open and allow air permeation. Once the pressure is again relieved, the gaps reclose to once again restrict air permeation. Thus, the air permeable bag formed in accordance with the method of claim 21 can be reused since the gaps can repeated open and close to restrict air permeation in a static state and allow air permeation in a second state. The combination of references cited by the Examiner, including the Yoichiro '260 reference, do not teach or suggest, nor render obvious, the subject matter of independent claim 21. For this reason, independent claim 21 is believed to be allowable over the combination of references cited by the Examiner.

The remaining dependent claims 12-20 depend directly or indirectly from claim 21 and are thus believed to be allowable in view of the above comments, as well as in view of the subject matter of each of the claims.

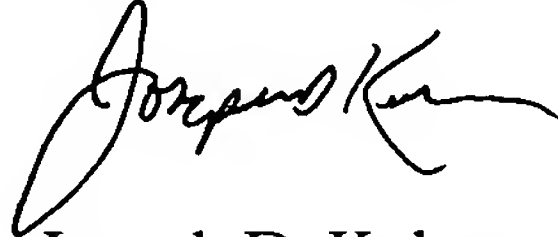
Specifically, claim 13 has been amended to more clearly state that the sealing material applied to the first polymer film fills the gaps formed in the first polymer film to restrict air permeation in the static state. Upon the application of heat to the sealing material, the sealing material softens and permits the opening of the gaps in the first polymer film to allow air permeation through the first polymer of film. The references cited by the Examiner do not teach or suggest, nor render obvious, the use of the sealing material through strict air permeation in the static state while allowing the gaps to open and permit air permeation upon the application of the presence of elevated air pressure within the open interior of the packaging bag. For this reason, claim 13 is believed to be allowable over the references cited by the Examiner.

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Amdt dated December 22, 2005
Reply to Office Action of September 26, 2005

The Examiner is invited to contact the applicant's undersigned attorney with any questions or comments, or to other facilitate prosecution of the present application.

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

A handwritten signature in black ink, appearing to read "Joseph D. Kuborn". The signature is fluid and cursive, with a large initial "J" and a stylized "K".

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